Attorney Docket No.

Patent 021565-075

IN THE UNITED STATES TRACE TRADEMARK OFFICE

In re Patent Application of

Frank Meulewaeter et al.

Application No.: 09/551,494

April 18, 2000

**MAIL STOP RCE** 

Group Art Unit: 1638

Examiner: Ashwin D Mehta

Confirmation No.: 2755

Filing Date: Title: METHODS AND MEANS FOR DELIVERING INHIBITORY RNA TO PLANTS AND APPLICATIONS

THEROF

### **SECOND** INFORMATION DISCLOSURE STATEMENT TRANSMITTAL LETTER

Commissioner for Patents P.O. Box 1450 Alexandria, VA 22313-1450

| Sir:   |   |
|--|---|
| Enclosed is a SECOND Inform PTO-1449 for the above-identified patent applica | nation Disclosure Statement and accompanying form tion.   |
| No additional fee for submission of an I                                     | DS is required.   |
| ☐ The fee of \$180.00 (1806) as set forth                                    | in 37 C.F.R. § 1.17(p) is also enclosed.  |
| A statement under 37 C.F.R. § 1.97(e)  | is also enclosed.   |
| A statement under 37 C.F.R. § 1.97(e), § 1.17(p) are also enclosed.          | and the fee of \$180.00 (1806) as set forth in 37 C.F.R.  |
| ☐ Charge to Deposit Accou  | unt No. 02-4800 for the fee due.  |
| A check in the amount of   |   |
| ☐ Charge to credit card.   | Form PTO-2038 is attached.  |
|  | any appropriate fees under 37 C.F.R. §§ 1.16, 1.17 and redit any overpayment, to Deposit Account No. 02-4800. |
|  | Respectfully submitted,   |
|  | BUCHANAN INGERSOLL PC   |
| P.O. Box 1404<br>Alexandria, Virginia 22313-1404<br>(703) 836-6620           | By Christophen Mark Dis D   |
| Date: January 12, 2006   | Christopher L. North, Ph.D.  Registration No. 50,433  |



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Sir:

In accordance with the duty of disclosure as set forth in 37 C.F.R. § 1.56, the accompanying information is being submitted in accordance with 37 C.F.R. §§ 1.97 and 1.98. Pursuant to 37 C.F.R. § 1.98, a copy of each of the documents cited is enclosed.

The information is submitted before the mailing of a first Office Action after the filing of a Request for Continued Examination under 37 C.F.R. § 1.114. Continued examination is requested and the fee required under 37 C.F.R. § 1.17(e) accompanies the present submission.

To assist the Examiner, the documents are listed on the attached form PTO-1449. It is respectfully requested that an Examiner initialed copy of this form be returned to the undersigned.

By:

Respectfully submitted,

**BUCHANAN INGERSOLL PC** 

Date <u>January 12, 2006</u>

Christopher L. North, Ph.D. Registration No. 50,433

P.O. Box 1404 Alexandria, Virginia 22313-1404 (703) 836-6620

Substitute for forms 1449A/PTO & 1449B/PTO

# SECOND INFORMATION DISCLOSUME STATEMENT BY APPLICANT

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|--------------------|-----------------|
| ATTORNEY'S DKT NO. | APPLICATION NO. |
| 021565-075         | 09/551,494      |
| APPLICANT          |                 |
| Meulewaeter et al  |                 |
| FILING DATE        | GROUP           |
| April 18, 2000     | 1635            |
|                    |                 |

| 44.00  |   | ا                       | U.S. PATENT DOCUMENTS  |                                 |   |                    | _          |
|--|---|-------------------------|--|---------------------------------|---|--------------------|------------|
| Examiner<br>Initials                         | Document<br>Number  | Kind Code<br>(if known) | Name of Patentee or Applicant of Cited Document  |                                 | Issue/Publication<br>Date<br>(MM-DD-YYYY)   |                    |            |
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| Examiner<br>Initials                         | Document<br>Number  | Kind Code<br>(if known) | Country  | Date of Publicat<br>(MM-DD-YYY) |   | ranslati<br>'es l  | tion<br>No |
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|  |   | * ** NONED              | ATENT LITERATURE DOCUMENTS)  |                                 |   |                    |            |
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| Examiner<br>Initials                         | item (book  | , magazine, jour        | mai, serial, symposium, catalog, etc.), date, page(  | s), volume-issue n              | umber(s),   | •                  |            |
|  | E. Rodriguez-Cerezo   | et al., "Genetic        | publisher, city and/or country where published.<br>Heterogeneity of the RNA Genome Population of t | the Plant Virus U5-             | TMV", Vi  | rology,            |            |
|  | lvol. 170. p. 418-423 (   | (1989) Academic         | e Press, Inc. San Diego, California USA<br>etic Drift in Foreign Sequences Replicating in an R     |                                 |   |                    |            |
|  | 192. p. 11-17 (1993)  | Academic Press          | , Inc. San Diego, California USA   |                                 |   |                    |            |
|  | G Kurath et al "RNa   | ase Protection A        | nalyses Show High Genetic Diversity among Field (1993) Academic Press, Inc. San Diego, California  | l Isolates of Satelli<br>a USA  | te Tobacc   | o Mos              | aic        |
|  | G Kurath et al "Toh   | amovirus Helper         | Specificity of Satellite Tobacco Mosaic Virus Invo   | olves a Domain Ne               | ar the 5' l   | End of             | the        |
|  | Satellite Genome", <i>Journal of General Virology</i> , vol. 74, p. 1233-1243 (1993) SGM, Reading, United Kingdom  G. Kurath et al., 'Mutation Analyses of Molecularly Cloned Satellite Tobacco Mosaic Virus During Serial Passage in Plants: |                         |  |                                 |   |                    |            |
|  | Evidence for Hotspots of Genetic Change", RNA, vol. 1, p. 491-500 (1995), RNA Society, Palo Alto, California  |                         |  |                                 |   |                    |            |
|  | F. Garcia-Arenal et al., "Variability and Genetic Structure of Plant Virus Populations", Annu. Rev. Phytopathol. 2001, vol. 39, p. 157-86, Annual Reviews, Palo Alto, California  |                         |  |                                 |   |                    |            |
|  | R. Joshi et al., "Strategies for Expression of Foreign Genes in Plants", FEBS, vol. 281, no. 1,2, p. 1-8, Elsevier Science  |                         |  |                                 |   |                    |            |
| <u>.                                    </u> | Publishers B.V.,Oxfor   | stemic Expression       | on of a Bacterial Gene by a Tobacco Mosaic Virus   | -Based Vector", Pi              | oc. Natl.   | Acad.              | Sci        |
|  | USA, vol. 88, p. 7204   | 1-7208 (Aug 199         | Genetics, Chicago, Illinois     Genetics Based on Virus-Induced Gene Silencing",                   |                                 |   |                    |            |
|  | 2. p. 108-113 (1999).   | Elsevier Science        | e Ltd. ISSN 1369-5266, Oxford, United Kingdom  |                                 |   |                    |            |
|  | J. Lindbo et al, "Virus-Mediated Reprogramming of Gene Expression in Plants", Current Opinion in Plant Biology 2001, vol. 4, p. 181-185, Elsevier Science Ltd., Oxford, United Kingdom  |                         |  |                                 |   |                    |            |
|  | M. Ruiz et al., "Initiation and Maintenance of Virus-Induced Gene Silencing", The Plant Cell, vol. 10, p. 937-946 (1998), The   |                         |  |                                 |   |                    |            |
|  | American Society of Plant Physiologists, Rockville, Maryland  G. Routh et al., "Characterization of Deletion and Frameshift Mutants of Satellite Tobacco Mosaic Virus", Virology, vol. 212, p.  |                         |  |                                 |   |                    |            |
|  | 1121-127 (1995), Acad   | demic Press, Inc        | c. San Diego, California USA   |                                 |   |                    |            |
|  | T. Mirkov et al., "Factors Affecting Efficient Infection of Tobacco with in Vitro RNA Transcripts from Cloned cDNAs of Sattelite Tobacco Mosaic Virus", Virology, vol. 179, p. 395-402 (1990), Academic Press, Inc. San Diego, California USA |                         |  |                                 |   |                    |            |
|  | M. Kumagai et al., "Cytoplasmic Inhibition of Carotenoid Biosynthesis with Virus-Derived RNA", <i>Proc. Natl. Acad. Sci., USA</i> , vol. 92, p. 1679-1683, (Feb 1995), Genetics, Chicago, Illinois  |                         |  |                                 |   |                    |            |
|  | W. Qiu et al, "Defective Interfering RNAs of a Satellite Virus", <i>Journal of Virology, June 2001</i> , p. 5429-5432, American Scoeity for Microbiology, Washington, D.C.  |                         |  |                                 |   |                    |            |
|  |   |                         | ruses", Plant Molecular Biology Reporter, vol. 6(4)  | ), p. 240-252 (1988             | 3)  |                    |            |
|  |   |                         |  |                                 |   |                    |            |

| Examiner  | Date       |  |
|-----------|------------|--|
| Signature | Considered |  |

EXAMINER: Initial if reference considered, whether or not citation is in conformance with M.P.E.P. § 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant. SEND TO: Assistant Commissioner for Patents, Washington, DC 20231.